Remarks presented at the Conference on Aging, Saturday March 12, 2005 to the Policy Committee for the 2005 White House Conference on Aging Solutions Forum
Dorcas R. Hardy, Chairman

Aging Solutions: "My America"

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Problem: Escalating financial and human costs of aging and chronic disease in the urban population.

Solution: Leverage existing assets with new technology to enable aging and chronically ill individuals to avoid institutionalization and remain safely independent at home.

Existing assets: Senior and disabled site housing (Section 202)
Home ownership
Home care provider network
Aging services provider network

New technology: Passive monitoring system
Low cost vital signs monitoring
Medication adherence technology

Incentives
Escalating Costs:

This year, the Commonwealth of Pennsylvania is scheduled to spend more than $13 billion in federal and state funds on health care for 1.7 million residents who meet the government definition, more than it spends on education. Medicaid spending in Pennsylvania rose 12% in 2004 primarily due to the cost of nursing home placement. Federal government has not approved Pennsylvania's application for an extra $750 million for nursing homes that care for Medicaid patients. In comparison, spending on education rose only 2% statewide.
From Philadelphia Inquirer By Marc Levy, Associated Press,
Harrisburg Medicaid funding in PA
Medicaid funding, State of PA
Monday December 20, 2004

Health Disparities

- The Commonwealth age adjusted death rates and incidence of disease are higher than the national average, and in Philadelphia, age adjusted mortality rates and incidence of disease are higher than the national average. (Taking Philadelphia's Temperature, Health Indicators for Healthy Philadelphia 2010, Dept. of Public Health, May 2003)

- Philadelphia has the bulk of the incidence of individuals with AIDS in the state of Pennsylvania. 63% of individuals with AIDS live in Philadelphia County. (PA Dept of Health, June 2004).

- Philadelphia County also significantly higher than the state in residents with income below the poverty level and percent of children under 18 living below the poverty level.

- **Much of the difference in mortality between African Americans and whites was a result of economic disadvantage. Mortality was higher in census tracts in which 30% or more of the population was below the poverty line than in those with lower poverty rates. A critical determinant of mortality rates across the city is poverty.**

Health Status Indicators for Pennsylvania Counties and Health District 2004 Report
Bureau of Health Statistics and Research
Pennsylvania Department of Health
Harrisburg, PA June 2004

The aging in Pennsylvania and nation wide:

A Profile of Older Americans: 2003
Department of Health and Human Services
Administration on Aging

- **About 30% (10.5 million) of all non-institutionalized older persons in 2002 lived alone (7.9 million women and 2.6 million men) they represent 41% of older women and 18% of older men**. **The proportion living alone increases with advanced age. Among women aged 75 and over, half (49.4%) lived alone in 2000.**

- In 2002, about half (52%) of persons over 65 lived in nine states, California 3.7 million, Florida 2.9 million, New York 2.5 million Texas 2.2 million, **Pennsylvania 1.9 million**. Ohio, Illinois, Michigan and NJ each had over 1 million.

- **In Pennsylvania, persons over 65 represent 15.5% of the total population. Most live in metropolitan areas in 2002 (77.4%)**. **The elderly are less likely to change residence than other age groups. The major sources of income as reported by the Social Security Administration for older persons in 2001 were SS (reported by 91% of older persons).**

Poverty and the elderly
From the Department of Human Services Administration on Aging.

- Among older Americans, the poverty rate is higher at older ages. In 1998, poverty rates were 9% for person's ages 65-74, 12% for person's ages75-84, and 14% for persons age 85 or older. Among the older population, poverty rates are higher among women, (13%) than among men (7%).

- There is a large disparity in net worth between black and white households headed by older Americans.

- About 3.6 million elderly persons (10.4%) were below the poverty level in 2002. Another 2.2 million or 6.4% of the elderly were classified as "near-poor" (income between the poverty level and 125% of this level). One of every twelve (8.3%) elderly Whites was poor in 2002, compared to 23.8% of elderly African Americans and 21.4% of elderly Hispanics.

- Higher than average poverty rates for older persons were found among those who lived in central cities (12.2%) outside metropolitan areas i.e. rural areas (11.9%) and in the South (12.7%).

- **Older women had a higher poverty rate (12.4%) than older men (7.7%) in 2002**. Older persons living alone were much more likely to be poor (19.2%) than were older persons living with families (6.0%). **The highest poverty rates (47.1%) were experienced by older Hispanic women who lived alone**.

- Older Americans spent 12.8% of their total expenditures on health, more than twice the proportion spent by all consumers (5.8%).

- **More than half of the older population (54.4%) reported having at least one disability; over a third (37.7%) reported at least one severe disability requiring assistance to meet important personal needs. There is a strong relationship between disability status and reported health status. Presence of a severe disability is also associated with lower income levels and educational attainment.**

Solutions: Strategic Use of Low Cost Technology With Existing Resources

The allocation of increasingly scarce resources to care for the aging and chronically ill populations nationally and worldwide has become a major dilemma for health care policy. Innovations that include technology, but retain compassion and allow for individual autonomy are crucial for safeguarding the goals of society and its perceived rights. The current health care system operates mostly in reactive mode, addressing illness when it presents rather than focusing on prevention and proactive monitoring of aging and chronic conditions.

Many older adults now are placed prematurely in institutional settings, reducing consumer choice and imposing costs on both the individual and ultimately the system. Often, a comprehensive network of shelter, support services, and case management could have kept them at home or at lower levels of care in the community.

About 73% of older homeowners in 2001 owned their homes free and clear. Older homeowners owned older homes. The median year of construction was 1963 for older homeowners compared to 1970 for all householders. The median value of homes owned by older persons in 2001 was $107,398, compared to a median home value of $123,887 for all homeowners.

From "A Quiet Crisis in America" A Report to Congress by the Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century. The

Commission's report contains more than 40 recommendations based on five guiding principles. First among them is to **link shelter and services to promote and encourage aging in place.**

Section 202 housing is the only affordable housing program dedicated exclusively to seniors, and can serve a wide range of housing and service needs. **Section 202 projects can be designed to provide support services for elderly people who are frail or at risk of being institutionalized.**

Services for home health and aging currently serve the community extensively, however reimbursement for innovation and the use of technology to enhance patient care, improve quality of life, and promote aging in place have not been realized.

Solutions: Innovative low cost technology

Passive monitoring

The goal of care for the frail elderly and those with chronic diseases is the delivery of the appropriate intervention, by the appropriate person at the appropriate time. **On a daily basis it is important to know if a frail or chronically ill individual is getting out of bed, eating, using the bathroom, taking medication, and performing other fundamental tasks necessary for independent living.**

As part of an overall care plan for individuals who have chronic disease, are aging and who live alone, the installation of a passive monitoring system in the home has proved to be an effective tool for enabling timely care interventions. Strategically placed wireless motion detectors simply and inexpensively collect and track an ongoing picture of an individual's normal daily routine. Information from the sensors is sent to a secure website where it is translated into an accurate observational picture of functional status. **A baseline analysis of the individual's safe independent status at home is recorded and subsequent information is compared to determine changes in activity. Real time information and simple trending of changes in functional status can be revealed.** Installation of these sensors is cost effective and importantly, non-obtrusive in the existing environment.

Passive monitoring can be easily integrated into supportive housing or private residences to better manage the costs of care and is a simple and cost effective platform for other technologies to enable individuals to remain at home.

Low cost monitoring of vital signs

Many low cost FDA approved tools (glucose meters, blood pressure cuff, pulse rate, incentive spirometer and digital scale) can be adapted with smart chip technology to send measurements over phone lines to physician and home care nurse. These measurements create a longitudinal record for greater accuracy of disease state assessment. When monitored at home, with more frequency, trending can be displayed, and intervention by the nurse or physician can occur before a crisis.

The control of diabetes is especially crucial to increasing the health and quality of life for the Medicare and Medicaid population where the disease is epidemic and enmeshed with other co-morbid conditions. The goal is to have in-home monitoring devices that guide high-risk patients in the daily exchange of relevant clinical information including vital signs, blood glucose level, weight, and lung functioning.

Medication Compliance

Patients with a history of frequent hospitalizations often have a fragmented and contradictory history of physician information with multiple prescriptions for medications and a poor understanding of the compliance regimen.

Adherence to medication can have a profound impact on patients with chronic conditions. Multiple prescribed medications in an aging population increase the pressure for compliance, and directions and schedules for taking medications may be difficult to follow. High blood pressure increases the risk of heart attack and stroke, and studies indicate that only 30% of U.S. patients have good control of their blood pressure as a result of poor adherence to a medication regimen.

Medication adherence can be tracked with medication dose dispensers for the homebound that remind the individual that it is time to take medication. Alternatively, smart sensors can placed in a conveniently placed medication box. When the box is opened, a signal is sent over the phone line that records the date and time.

This low cost and flexible combination of technologies has a potentially wide and significant application to create better avenues for care of the chronically ill and aging urban Medicare and Medicaid population. Currently the Nation is paying dearly for the complications of unmanaged chronic illness and aging within the current model of episodic, crisis driven care.

About Keystone:
Keystone Hospice and Keystone Home Health Services, Inc. (Keystone) is located in Wyndmoor, Pennsylvania, just outside the City of Philadelphia. Keystone was founded in a pioneering effort to meet the needs of those people with a terminal diagnosis who wish to remain at home, with the comprehensive support of trained staff. Keystone's growth was stimulated by the HIV/AIDS epidemic, where the development of opportunistic illnesses has increased the need for more home care services and for services of longer duration. Keystone learned from the care of individuals with HIV/AIDS that the disease unfolds like *"aging in fast forward."*

Gail Inderwies, RN, BSN, MBA, Executive Director of Keystone Hospice and Vice-President of Keystone Home Care Services, Inc. in Wyndmoor, PA, recognized that many home health patients became sicker, and eventually needed hospice care. In response to this need, she established Keystone Hospice as an independent, non-profit agency to care for these individuals. Over the course of her thirty year career, Ms. Inderwies was honored to be a presenter at the National Council on AIDS Housing and in 1995 was one of four delegates from the Commonwealth of Pennsylvania to be invited to the White House Conference on AIDS. She has been widely recognized for her innovations in pain management and continues her commitment

to care of the terminally ill, elderly and medically disenfranchised. She believes that it is imperative that we look at new low cost alternatives that support quality of life and provide a basis of reasonable, replicable and cost effectiveness while promoting beneficence to all persons from all levels in life. Her America is aging and poor, burdened with chronic disease that is draining the resources of the current health system. It is this America that the Social contract can be maintained by the use of highly innovative technology to compliment the high touch they so desperately need.

The following article appeared in the Philadelphia Inquirer Wednesday, March 16, 2005. Questions that linger over the death of Mr. Charles Medley, an 81-year-old WWII veteran, are poignant and timely.

Mr. Medley's decline started with the death of his wife in October. The passive monitoring system would have tracked that decline, and reported significant anomalies in behavior to other care givers (his son or possibly a case manager). The passive monitoring system is very similar to the neighbor, Mrs. McGaughey, who checks on the first floor residents every day by simply knocking on the door, except that the passive monitor sends its reports via the phone line. Mr. Medley would not have been on the floor for 10 days.

Posted on Wed, Mar. 16, 2005 **The Philadelphia Inquirer**

Questions linger over man's death

Charles Medley passed away possibly 10 days before the discovery in low-income housing.

By Nancy Petersen

Inquirer Staff Writer

As Charles Medley - a veteran, a loving father, and a man about town - is laid to rest today, questions continue to swirl about the circumstances surrounding his death.

He was found dead March 8 in his West Chester apartment at 222 N. Church St., in a building for low-income senior citizens owned by the Housing Authority of Chester County.

According to the county Coroner's Office, Medley, 81, had been dead for as long as 10 days.

"In government-sponsored housing designed to take care of senior citizens... this is outrageous," Chester County Commissioner Andrew Dinniman said at yesterday's commissioners' meeting. "I was just put back and emotionally struck by the wrongness of this."

So was Medley's son, Charles Medley Jr.

"We're furious about what happened," he said. "Somebody ought to be responsible."

Tonya Mitchell Weston, acting executive director of the Housing Authority, said that while she is sympathetic, the authority is just the landlord.

"When people move in, they have to have a physician's statement saying they can live independently," she said. "We are not assisted living."

Weston, who has been executive director for three months, said that when the authority received the complaint on March 8 about a smell coming from Medley's third-floor apartment, the maintenance superintendent responded in five minutes and the public housing manager was there within 15 minutes.

"All the proper authorities were called, and we notified the family," she said. "I believe we did all that we could do."

Although the county commissioners appoint the members of the Housing Authority board, the agency itself is separate from county government and not under its control, said the authority's solicitor, Vince Donohue.

Nevertheless, the commissioners said yesterday that they were going to investigate.

Charles Medley Jr., who lives in Honey Brook, said that after his mother died in October, his father started deteriorating. He wasn't keeping his place clean, he wasn't taking out the trash, and he appeared to be depressed, the son said.

He said he asked the building manager to keep an eye on his father, and he asked for the phone numbers of outside services he could contact. The manager never got back to him with names or numbers, he said.

Charles Medley Jr. also said there were maintenance issues with appliances and fixtures in the apartment that had not been addressed.

Weston said the authority can make referrals to outside social-service agencies, but a tenant doesn't have to agree to be seen.

She said that once a maintenance complaint is received, the authority has 24 hours to fix something if the situation is an emergency, or 30 days otherwise.

The son said the last time he saw his father was Feb. 23, his 81st birthday. "We tried to check up on him as often as we could," he said. He has two brothers and four sisters, none of whom lives in West Chester.

He said the coroner told the family their father died of a heart attack.

Residents said yesterday that they were still trying to deal with Medley's death.

"I think it was appalling," said Joanne McGaughey, 60, who has lived in the building for a little more than two years. "He was a very nice man."

Charlie Castle said that he had known Medley since childhood and that they still enjoyed a drink together every now and then.

Castle, who lives on the first floor, said his wife checks on the first-floor residents every day to make sure they are OK.

"If somebody says, 'Go away,' " McGaughey said, "at least you know they're alive." But she said no such system was in place on the third floor.

Charles Medley Jr. said his father was a truck driver in the Army during World War II. He spoke French, German and Spanish, he said. A construction worker at the time of his retirement, he had also worked at Immaculata University as a chef, and at one time owned a fish store in West Chester.

He loved to dance, and he never missed putting on his Army uniform and marching in a parade, he said.

"For someone to be that well-known and for someone not to have noticed he wasn't around... it is just a shame."

Services are 11 a.m. today at the DeBaptiste Funeral Home Inc., Worthington and Miner Streets, West Chester.

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